International Journal of Research in Library Science (IJRLS)

ISSN: 2455-104X

DOI: 10.26761/IJRLS.7.2.2021.1404

Volume 7, Issue 2 (April-June) 2021, 89-100, Paper ID: IJRLS-1404

Received: 9 May. 2021 ; Accepted: 19 May. 2021 ; Published: 22 May. 2021

Use of Web Based Information Resources by the Faculty Members of Engineering Colleges in Mysuru Region: A Study

Shivakumara M.[1]; Mallinath Kumbar[2]

Research Scholar, Department of Library and Information Science, University of Mysore, Manasagangotri, Mysuru-570006[1]; Professor, Department of Library and Information Science, University of Mysore, Manasagangotri, Mysuru -570006[2]

shivakumar.mbs@gmail.com, mallinathk@yahoo.com

ABSTRACT

The present study examines the purpose of use web resources, use of various types of web based information resources, frequently and benefits of use of web information resources, use of search engines for accessing e-resources, preferred method to read electronic resources, search option preferred for accessing web based information resources, extent of use of field based search methods, extent of use of advanced search facilities and factors influencing the use of search engines among the faculty members of Engineering Colleges in Mysore Region. The study indicates that the most of the faculty members of engineering colleges are aware of various types of e-resources and search strategies for searching the relevant information from the web. The article concludes with appropriate suggestions to improve use of web based information resources by the faculty members.

KEYWORDS: E-Resources, Web Environment, ISB, Retrieval Techniques, Search Strategies, Information Seeking and Searching Behaviour.

1. INTRODUCTION

The emergence of the Internet, especially World Wide Web, is becoming the new technique of delivery of information resources and services, and which has led a revolution in the libraries. In this web based environment, the information resources and services can be accessed and delivered as and when required, therefore, the services of the libraries are not confined with the four walls, but are integrated into local, regional, national and international networks. The Information seeking and searching behavior refers to those activities a person engages in when identifying his or her own need for information, searching for such information in any way and using the information. Due to recent advances in information processing, storage and communication technologies have revolutionized the role of libraries in disseminating information services to their information seekers. The faculty members, today, are visibly more efficient in their communication and they access current information quickly. Electronic media, in this context, has a growing role to address the changing communication and information needs

of the faculty members. They are continuously discovering and using electronic media for scholarly communication. The faculty members of the engineering colleges are gradually adopting new technologies for satisfying their information needs while carrying out teaching, research and academic activities. The present study was conducted to know the use of web based information resources by the faculty members of engineering colleges in Mysuru region. Based on the results of the study, further suggestions are drawn to improve use of electronic information resources available in web environment.

2. REVIEW OF LITERATURE

Many similar studies related to the topic have been reviewed, and the literature review gives a broader outlook. Some of the important reviews are presented below**.**

Nicholas, Huntington, Jamali, Rowlands, & Fieldhouse (2009) have focused on the actual information-seeking behavior of students in a digital scholarly environment. It also compares the student information-seeking behavior with that of other academic communities and in some cases, for practitioners. The study finds a typical form of information-seeking behavior associated with students and the differences between them and other members of the academic community.

Kumar & Shukla (2013) examined the information seeking patterns in the electronic environment of science and arts research scholars. The data were collected through questionnaire method, total 139 randomly selected Ph.D. scholars of science and Arts department at Banaras Hindu University, India. It was found from the study majority of the science researcher scholars always use electronic resources, but Arts research scholars even depend on a print form of publications for their information needs. The best choice for information seeking to both the groups of research scholars is electronic journals, then electronic books, electronic reports, electronic thesis, electronic conference proceedings respectively and then the other sources. The study suggested training and awareness programs for the respondents to effective use of information sources and services.

Geçer (2014) has studied the university student's information search and commitment strategies on web environment and internet usage self-efficacy beliefs in terms of such variables as gender, department, grade level and frequency of internet use; and whether there is a significant relationship between these beliefs. A study conducted for first and fourth-degree students at Kocaeli University and Data collected about university students' information search and commitment strategies on web environment and internet usage self-efficacy beliefs. The outcomes specify the students' scores on elaboration strategy in the Web environment and scores of self-efficacy regarding Internet use were at the intermediate level.

Kumar & Kumbar (2015) conducted a study on autonomous engineering institutions affiliated to Visvesvaraya Technological University in Karnataka to examine the factors that affect the optimum utilization of electronic information resources and search pattern. The study mainly focused on the use of different types of electronic information resources by the faculty, source of awareness, learn to use, problems faced, purpose of use, preferred search engines and search methods for effective retrieval of electronic information resources. The members of faculty are well aware of existing resources and library services. But they need training in the area of information search and retrieval in the web environment.

Savolainen (2016) has elaborated the picture of strategies for information searching and seeking by reviewing the conceptualizations in the field of library and information science. The author gives an idea of Mintzberg's strategy

and actions. It involved 57 LIS surveys to search the required information. The work clearly explains using the various steps involved searching in the web.

3. OBJECTIVES OF THE STUDY

The objectives behind conducting the present study are:

1. To identify the purpose of use of web based information resources by the faculty members.
2. To assess the use of web based information resources and to know the frequency and benefits of use of web resources.
3. To assess the use of Search engines, Meta Search Engines and factors influencing to use these search engines.
4. To know the search strategies used for accessing web based information resources and to find out the extent of use of field based search methods to access information resources from the Web.

4. METHODOLOGY

The study's scope is restricted to use of web based information resources by the faculty members of engineering colleges in Mysuru region. The survey method was adopted using questionnaire as a tool for data collection. A structured questionnaire was designed and distributed among faculty members of engineering colleges in the Mysore region. Out of 1100 questionnaires distributed among faculty members, 913 filled-in questionnaires were received back, amounting to 83.00%. In addition to the questionnaire method, interview schedule and observation method were also used to collect required information.

5. DATA ANALYSIS

The data collected by different methods were analyzed and interpreted and the same is presented in the following tables.

5.1 Gender Wise Distribution

The gender wise distribution of the faculty members under the study is shown in Table-1. The Table-1 shows that of the 913 total faculty members, 551 (60.35%) are 'Male' and the remaining 362 (39.65%) are 'Female'.

Table-1: Gender Wise Distribution

Gender	Number (N=913)	Percentage
Male	551	60.35
Female	362	39.65

5.2 Purpose of Use Web Resources

The purpose of use web resources by the faculty members has been summarized in Table-2. The Table-2 depicts that 398 (43.59%) faculty members opine as they 'Most Frequently Use' web resources for teaching / learning purposes, followed by 361 (39.54%) faculty members opine as they 'Occasionally Use' web resources for research work,384 (42.06%) faculty members opine as they 'Occasionally Use' web resources for Reading / Writing articles / books, 382 (41.84%) faculty members opine as they 'Most Frequently Use' web resources to keep up-to-date subject information, 466 (51.04%) faculty members opine as they 'Occasionally Use' web resources for accessing standards and patents, 352 (38.55%) faculty members opine as they 'Frequently Use' web resources for preparation for seminars, conference and workshop, 306 (33.52%) faculty members opine as they 'Frequently Use' web resources

for basic scientific and technical information, 290 (31.76%) faculty members opine as they 'Occasionally Use' web resources for collecting general information, 324 (35.49%) faculty members opine as they 'Frequently Use' web resources to access audio/ visual materials and 243 (26.62%) faculty members opine as they 'Not Use' web resources for framing curriculum (syllabus).

Table-2: Purpose of Use Web Resources

Purpose	Number (N=913)				
	NU	**RU**	**OU**	**FU**	**MFU**
For teaching / Learning purposes	03 (00.33)	62 (06.79)	243 (26.62)	207 (22.67)	398 (43.59)
For research work	28 (03.07)	54 (05.91)	361 (39.54)	169 (18.51)	301 (32.97)
Reading / Writing articles / books	02 (00.22)	81 (08.87)	384 (42.06)	247 (27.05)	199 (21.80)
To keep up-to-date subject information	06 (00.66)	72 (07.89)	92 (10.08)	361 (39.54)	382 (41.84)
For accessing standards and patents	89 (09.75)	74 (08.11)	466 (51.04)	136 (14.90)	148 (16.21)
Preparation for Seminars, conference & workshop	21 (02.30)	108 (11.83)	231 (25.30)	352 (38.55)	201 (22.02)
For basic scientific and technical information	13 (01.42)	116 (12.71)	298 (32.64)	306 (33.52)	180 (19.72)
For collecting general information	07 (00.77)	120 (13.14)	290 (31.76)	252 (27.60)	244 (26.73)
To access audio / visual materials	24 (02.63)	81 (08.87)	178 (19.50)	324 (35.49)	306 (33.52)
Framing Curriculum (syllabus)	243 (26.62)	206 (22.56)	129 (14.13)	192 (21.03)	143 (15.66)
Codes: 1. Not use 2. Rarely use 3. Occasionally use 4. Frequently use 5. More frequently use					
$\chi 2$=2315.84, df=36, P=0.00					
Note: Figures in parentheses indicate percentage					

5.3 Use of Web Based Information Resources

The use of web based information resources by the faculty members has been shown in Table-3. The Table-3 depicts that 376 (41.18%) faculty members opine as they 'Frequently' use e-books, followed by 281 (30.78%) faculty members opine as they 'Frequently' use of e-journals, 327 (35.82%) faculty members opine as they 'Frequently' use of e-databases, 320 (35.05%) faculty members opine as they 'Daily' use of e-magazines / news Papers, 384 (42.06%) faculty members opine as they 'Occasionally' use of e-theses and dissertations, 323 (35.38%) faculty members opine as they 'Rarely' use of e-conference proceedings, 448 (49.07%) faculty members opine as they 'Occasionally' use of e-reports, 301 (32.97%) faculty members opine as they 'Frequently' use of e-standards/patent, 388 (42.50%) faculty members opine as they 'Occasionally' use of e-tutorials, 306 (33.52%) faculty members opine as they 'Occasionally' use of e-project reports, assignments etc.

Table-3: Use of Web Based Information Resources

Web Based Information Resources	Number (N=913)				
	Never	**Rarely**	**Occasionally**	**Frequently**	**Daily**
E- Books	21 (02.30)	183 (20.04)	288 (31.54)	376 (41.18)	116 (12.71)
E-Journals	07 (00.77)	208 (22.78)	225 (24.64)	281 (30.78)	192 (21.03)
E- Databases	09 (00.99)	144 (15.77)	302 (33.08)	327 (35.82)	131 (14.35)
E-Magazines / News Papers	16 (01.75)	182 (19.93)	247 (27.05)	148 (16.21)	320 (35.05)
E-Theses and Dissertations	22 (02.41)	196 (21.47)	384 (42.06)	137 (15.01)	174 (19.06)
E-Conference Proceedings	28 (03.07)	323 (35.38)	208 (22.78)	261 (28.59)	93 (10.19)
E-Reports	11 (01.20)	188 (20.59)	448 (49.07)	202 (22.12)	64 (07.01)
E-Standards/Patents	18 (01.97)	229 (25.08)	283 (31.00)	301 (32.97)	82 (08.98)
E-Tutorials	20 (02.19)	185 (20.26)	388 (42.50)	119 (13.03)	201 (22.02)
E-Project Reports, Assignments, etc.	09 (00.99)	202 (22.12)	306 (33.52)	216 (23.66)	180 (19.72)
$\chi 2$=908.96, df=36, P=0.00					
Note: Figures in parentheses indicate percentage					

5.4 Frequency of Use of Web Resources

The frequency of use of web resources has been summarized in Table-4. The Table-4 depicts that 330 (36.14%) of faculty members use web resources 'Daily, followed by 206 (22.56%) use 'Twice a Week', 167 (18.29%) use 'Occasionally', 119 (13.03%) use 'Once a Week', and 91 (09.97%) use 'Fortnightly.

Table-4: Frequently of Use of Web Resources

Frequency of Use	Civil Engg. (N=161)	Mech. Engg. (N=181)	Elect. Engg. (N=152)	Comp. Sci. Engg. (N=190)	Elec. &Com. Engg. (N=188)	Biotech. Engg. (N=41)	Total (N=913)
Daily	37 (22.98)	46 (25.41)	24 (15.79)	116 (61.05)	89 (47.34)	18 (43.90)	330 (36.14)
Twice a week	34 (21.12)	71 (39.23)	26 (17.11)	34 (17.89)	30 (15.96)	11 (26.83)	206 (22.56)
Once in a week	29 (18.01)	30 (16.57)	22 (14.47)	15 (07.89)	19 (10.11)	04 (09.76)	119 (13.03)
Fortnightly	20	11	41	02	14	03	91

	(12.42)	(06.08)	(26.97)	(01.05)	(07.45)	(07.32)	(09.97)
Occasionally	41 (25.47)	23 (12.71)	39 (25.66)	23 (12.11)	36 (19.15)	05 (12.20)	167 (18.29)
$\chi 2=192.897$, df=20 , P=0.00							
Note: Figures in parentheses indicate percentage							

5.5 Benefits of Use of Web Information Resources.

The benefits of use of web information resources by the faculty members has been summarized in Table-5. The Table-5 depicts that 807 (88.38%) of faculty members are benefited by the features of 24/7 access to electronic resources, followed by 802 (87.84%) Improvement in the quality of professional work, 761 (83.35%) Access to up-to-date information, 757 (82.91%) Better source of information, 720 (78.86%) Easy to accessibility / use, 717 (78.53%) Time saving, 711 (77.87%) Easily portability of e-resources and 623 (68.23%) of faculty members are benefited by the features of Information available in various formats as per the need.

Table-5: Benefits of Use of Web Information Resources.

Benefits	**Civil Engg. (N=161)**	**Mech. Engg. (N=181)**	**Elect. Engg. (N=152)**	**Comp. Sci. Engg. (N=190)**	**Elec. &Com. Engg.(N=188)**	**Biotech. Engg. (N=41)**	**Total (N=913)**
Time saving	138 (85.71)	124 (68.51)	108 (71.05)	176 (92.63)	142 (75.53)	29 (70.73)	717 (78.53)
Easy to accessibility / use	129 (80.12)	118 (65.19)	123 (80.92)	181 (95.26)	138 (73.40)	31 (75.61)	720 (78.86)
Better source of information	121 (75.16)	134 (74.03)	130 (85.53)	172 (90.53)	166 (88.30)	34 (82.93)	757 (82.91)
Access to up-to-date information	136 (84.47)	128 (70.72)	132 (86.84)	179 (94.21)	154 (81.91)	32 (78.05)	761 (83.35)
Improvement in the quality of professional work	143 (88.82)	160 (88.40)	142 (93.42)	183 (96.32)	138 (73.40)	36 (87.80)	802 (87.84)
Information available in various formats as per the need.	93 (57.76)	131 (72.38)	113 (74.34)	148 (77.89)	117 (62.23)	21 (51.22)	623 (68.23)
Easily portability of e-resources	118 (73.29)	129 (71.27)	121 (79.61)	167 (87.89)	143 (76.06)	33 (80.49)	711 (77.87)
24/7 access to electronic resources	142 (88.20)	163 (90.06)	140 (92.11)	181 (95.26)	144 (76.60)	37 (90.24)	807 (88.38)
Note: Figures in parentheses indicate percentage							

5.6 Preferred Method to Read Electronic Resources

The preferred method to read electronic resources by the faculty members has been summarized in Table-6. The Table-6 also indicates 386 (42.28%) of faculty members prefer 'Direct reading from the computer screen' with Mean 3.5699 and SD 1.4239, followed by 192 (21.03%) of faculty members prefer 'Print the resource and read' with Mean 2.8073and SD 1.4611, 183 (20.04%) of faculty members prefer 'Save the material in portable devices for

further reading' with Mean 3.0328 and SD 1.4292. About 152 (16.65%) of faculty members prefer 'All the mentioned methods of reading' with Mean 2.9803 and SD 1.6955.

Table-6: Preferred Method to Read Electronic Resources

Preferred Method of Reading	Number (N=913)								
	Civil Engg. (N=161)	Mech. Engg. (N=181)	Elect. Engg. (N=152)	Comp. Sci. Engg. (N=190)	Elec. &Com. Engg. (N=188)	Biotech. Engg. (N=41)	Total (N=913)	Mean	SD
Direct reading from the computer screen	49 (30.43)	52 (28.73)	46 (30.26)	122 (64.21)	103 (54.79)	14 (34.15)	386 (42.28)	3.5699	1.4239
Save the material in portable devices for further reading	32 (19.88)	36 (19.89)	52 (34.21)	29 (15.26)	25 (13.30)	09 (21.95)	183 (20.04)	3.0328	1.4292
Print the resource and read	38 (23.60)	64 (35.36)	31 (20.39)	20 (10.53)	34 (18.09)	05 (12.20)	192 (21.03)	2.8073	1.4611
All the above	42 (26.09)	29 (16.02)	23 (15.13)	19 (10.00)	26 (13.83)	13 (31.71)	152 (16.65)	2.9803	1.6955
$\chi 2$=120.208, df=15, P=0.00									
Note: Figures in parentheses indicate percentage									

5.7 Search Option Preferred for Accessing / Searching Web Based Information Resources

The search option preferred for accessing / searching web based information resources by the faculty members has been summarized in Table-7. The Table-7 depicts that 397 (43.48%) of faculty members prefer 'Basic Search' for accessing / searching web based information resources, followed by 270 (29.57%) of faculty members prefer 'Advance Search' and 246 (26.94%) of faculty members prefer 'Both' i.e. Basic and Advance Search for accessing / searching web based information resources.

Table-7: Search Option Preferred for Accessing / Searching Web Based Information Resources

Search option	Civil Engg. (N=161)	Mech. Engg. (N=181)	Elect. Engg. (N=152)	Comp. Sci. Engg. (N=190)	Elec. &Com. Engg. (N=188)	Biotech. Engg. (N=41)	Total (N=913)
Basic Search	95 (59.00)	116 (64.08)	36 (23.68)	27 (14.21)	107 (56.91)	16 (39.02)	397 (43.48)
Advance Search	37 (22.98)	48 (26.51)	82 (53.94)	39 (20.52)	58 (30.85)	06 (14.63)	270 (29.57)
Both	29 (18.01)	17 (09.39)	34 (22.36)	124 (65.26)	23 (12.23)	19 (46.34)	246 (26.94)

$\chi 2$=278.665, df=10, P=0.00
Note: Figures in parentheses indicate percentage

5.8 Use of Search Engines for Accessing E-Resources

The use of search engines for accessing e-resources by the faculty members has been summarized in Table-8. The Table-8 depicts that 266 (29.13%) faculty members use 'Alta Vista' for accessing e-resources 'To some extent', followed by 314 (34.39%) faculty members use 'Bing' for accessing e-resources 'To some extent', 502 (54.98%) faculty members use 'Yahoo' for accessing e-resources 'To great extent', 714 (78.202%) faculty members use 'Google' for accessing e-resources 'To great extent', 274 (30.01%) faculty members use 'MSN' for accessing e-resources 'To some extent', 307 (33.63%) faculty members use 'InfoSeek' for accessing e-resources 'To great extent', 342 (37.46%) faculty members use 'Lycos' for accessing e-resources 'To some extent'.

Table-8: Use of Search Engines for Accessing E-Resources

Search Engines	**Number (N=913)**				
	To great extent	**To moderate extent**	**To some extent**	**To little extent**	**Not at all**
Alta Vista	180 (19.72)	217 (23.77)	266 (29.13)	197 (21.58)	53 (05.81)
Bing	218 (23.88)	261 (28.59)	314 (34.39)	102 (11.17)	18 (01.97)
Yahoo	502 (54.98)	97 (10.62)	205 (22.45)	73 (08.00)	36 (03.94)
Google	714 (78.20)	143 (15.66)	23 (02.52)	31 (03.40)	02 (00.22)
MSN	192 (21.03)	98 (10.73)	274 (30.01)	203 (22.23)	146 (15.99)
InfoSeek	307 (33.63)	206 (22.56)	211 (23.11)	86 (09.42)	103 (11.28)
Lycos	143 (15.66)	181 (19.82)	342 (37.46)	173 (18.95)	74 (08.11)
$\chi 2$=1711.163, df=24, P=0.00					
Note: Figures in parentheses indicate percentage					

5.9 Use of Meta Search Engines for Accessing E-Resources

The use of meta search engines for accessing e-resources by the faculty members has been shown in Table-9. The Table-9 depicts that 296 (32.42%) faculty members use 'Dogpile' meta search engines for accessing e-resources 'To great extent', followed by 304 (33.30%) faculty members use 'Excite' meta search engines for accessing e-resources 'To great extent', 263 (28.81%) faculty members use 'Info.com' meta search engines for accessing e-resources 'To great extent', 301 (32.97%) faculty members use 'Kayak.com' meta search engines for accessing e-resources 'To moderate extent', 314 (34.39%) faculty members use 'Sky scanner' meta search engines for accessing e-resources 'To great extent', 401 (43.92%) faculty members use 'Metacrawler' meta search engines for accessing e-resources 'To great extent', 293 (32.09%) faculty members use 'Mobissimo' meta search engines for accessing e-resources 'To great extent', 386 (42.28%) faculty members use 'Otalo.com' meta search engines for accessing e-

resources 'To moderate extent' and 307 (33.63%) faculty members use 'Publisher's clearing house Search and Win' meta search engines for accessing e-resources 'To little extent'.

Table-9: Use of Meta Search Engines for Accessing E-Resources

Meta Search Engines	Number (N=913)				
	To great extent	To moderate extent	To some extent	To little extent	Not at all
Dogpile	296 (32.42)	143 (15.66)	168 (18.40)	204 (22.34)	102 (11.17)
Excite	304 (33.30)	262 (28.70)	119 (13.03)	86 (09.42)	142 (15.55)
Info.com	263 (28.81)	207 (22.67)	260 (28.48)	74 (08.11)	109 (11.94)
Kayak.com	203 (22.23)	301 (32.97)	66 (07.23)	142 (15.55)	201 (22.02)
Skyscanner	314 (34.39)	202 (22.12)	153 (16.76)	98 (10.73)	146 (15.99)
Metacrawler	401 (43.92)	147 (16.10)	115 (12.60)	163 (17.85)	87 (09.53)
Mobissimo	293 (32.09)	219 (23.99)	206 (22.56)	82 (08.98)	113 (12.38)
Otalo.com	88 (09.64)	386 (42.28)	151 (16.54)	230 (25.19)	58 (06.35)
Publisher's clearing house Search and Win	139 (15.22)	89 (09.75)	95 (10.41)	307 (33.63)	283 (31.00)
$\chi 2$= 1376.664, df=32, P=0.00					
Note: Figures in parentheses indicate percentage					

5.10 Extent of Use of Field Based Search Methods to Access Web Resources

The extent of use of field based search methods to access web resources by the faculty members has been shown in Table-10. The Table-10 depicts that 298 (32.64%) faculty members use 'Author' field based search 'To moderate extent', followed by 337 (36.91%) faculty members use 'Title' field based search 'To great extent', 307 (33.63%) faculty members use 'Subject' field based search 'To moderate extent', 219 (23.99%) faculty members use 'Keyword' field based search 'To great extent', 293 (32.09%) faculty members use 'Publisher' field based search 'To little extent', 262 (28.70%) faculty members use 'Author Address' field based search 'To some extent', 291 (31.87%) faculty members use 'File format' field based search 'To little extent' and 275 (30.12%) faculty members use 'Specific period' field based search 'To some extent'.

Table-10:Extent of Use of Field Based Search Methods to Access Web Resources

Field Based Search	Number (N=913)				
	To greater extent	To moderate extent	To some extent	To little extent	Not at all

Author	231 (25.30)	298 (32.64)	201 (22.02)	162 (17.74)	21 (02.30)
Title	337 (36.91)	203 (22.23)	318 (34.83)	46 (05.04)	09 (00.99)
Subject	263 (28.81)	307 (33.63)	216 (23.66)	95 (10.41)	32 (03.50)
Keyword	219 (23.99)	114 (12.49)	205 (22.45)	183 (20.04)	192 (21.03)
Publisher	136 (14.90)	197 (21.58)	143 (15.66)	293 (32.09)	144 (15.77)
Author address	172 (18.84)	202 (22.12)	262 (28.70)	103 (11.28)	174 (19.06)
File format like doc., ppt., & pdf.	248 (27.16)	146 (15.99)	166 (18.18)	291 (31.87)	62 (06.79)
Specify period	181 (19.82)	220 (24.10)	275 (30.12)	184 (20.15)	53 (05.81)
$\chi 2$=1134.657, df=28, P=0.00					
Note: Figures in parentheses indicate percentage					

5.11 Extent of Use of Advanced Search Facilities

The extent of use of advanced search facilities by the faculty members has been shown in Table-11. The Table-11 indicates that 226 (24.75%) of faculty members use Boolean search 'To great extent', followed by 392 (42.94%) of faculty members use Truncation/ wildcard search 'To little extent', 299 (32.75%) of faculty members use Field based search 'To some extent', 317 (34.72%) of faculty members use Phrases search 'To some extent' and 236 (25.85%) of faculty members use Digital Object Identifier 'To some extent'.

Table-11: Extent of Use of Advanced Search Facilities

Advance Search Facilities	**Number (N=913)**				
	To great extent	**To moderate extent**	**To some extent**	**To little extent**	**Not at all**
Boolean search (AND, OR, NOT)	226 (24.75)	217 (23.77)	212 (23.22)	163 (17.85)	95 (10.41)
Truncation/ wildcard search (* and ?)	101 (11.06)	72 (07.89)	162 (17.74)	392 (42.94)	186 (20.37)
Field based search	146 (15.99)	184 (20.15)	299 (32.75)	186 (20.37)	98 (10.73)
Phrases search	305 (33.41)	207 (22.67)	317 (34.72)	63 (06.90)	21 (02.30)
Digital Object Identifier	163 (17.85)	113 (12.38)	236 (25.85)	188 (20.59)	213 (23.33)
$\chi 2$=783.707, df=16, P=0.00					
Note: Figures in parentheses indicate percentage					

5.12 Factors Influencing the Use of Search Engines

The factors influencing the use of search engines by the faculty members has been shown in Table-12. The Table-12 depicts that 487 (53.34%) faculty members 'Agree' that it is easy to browse the internet sources, followed by 403 (44.14%) faculty members 'Strongly Agree' that they are influenced by the user friendly features, 383 (41.95%) faculty members 'Agree' that they know the search strategy of the search engine, 306 (33.52%) faculty members 'Strongly Agree' that they are influenced by the popularity of search engine, 321 (35.16%) faculty members 'Agree' that search engines are recommendations by library staff / colleagues, 273 (29.90%) faculty members 'Strongly Agree' that more relevant information can be retrieved and 305 (33.41%) faculty members 'Strongly Agree' that advanced search features in search engines help in achieving relevant resources / output.

Table-12: Factors Influencing the Use of Search Engines

Factors	**Number (N=913)**				
	SA	**A**	**NO**	**D**	**SD**
Easy to User friendly features browse the Internet sources	289 (31.65)	487 (53.34)	32 (03.50)	91 (09.97)	14 (01.53)
User friendly features	403 (44.14)	316 (34.61)	42 (04.60)	129 (14.13)	23 (02.52)
I know the search strategy of the search engine	201 (22.02)	383 (41.95)	117 (12.81)	123 (13.47)	89 (09.75)
Popularity of search engine	306 (33.52)	258 (28.26)	176 (19.28)	21 (02.30)	152 (16.65)
Recommendations by library staff / colleagues	212 (23.22)	321 (35.16)	150 (16.43)	86 (09.42)	144 (15.77)
More relevant information can be retrieved	273 (29.90)	215 (23.55)	188 (20.59)	174 (19.06)	63 (06.90)
Advanced search features help in achieving relevant resources / output	305 (33.41)	266 (29.13)	174 (19.06)	86 (09.42)	82 (08.98)
Codes: 1. Strongly Agree 2. Agree 3. No Opinion 4. Disagree 5. Strongly Disagree					
$\chi 2$=798.038, df=24, P=0.00					
Note: Figures in parentheses indicate percentage					

6. SUGGESTIONS

Based on the above results the following suggestions are made for further improvement in use of web based information resources by the faculty members of engineering colleges in Mysuru region

- The speed of the internet should be increased to save user valuable time and to speed up information search and retrieval process.
- The members of faculty should be trained in using advance strategies for retrieval of relevant information.
- The faculty members should further improve their information searching skills to make better use of largely available web information resources.
- The library and information centers should organize training, seminars and workshops for the users at regular interval of time to keep users in tune with latest Information and Communication Technology enabled technologies.

- The library staff should create a database of e-mail of all faculties and as soon as new resources is available or subscribed it should be intimated immediately via e-mail.
- The web designers/ publishers/ distributors should provide online help menu in the search page for better utilization of their information resources.
- Need of well-equipped classrooms/laboratory with PC's, LCD projector, with dedicated Wi-Fi connectivity should be made available in the department and campus.
- The engineering college libraries should provide federated search facility and resources discovery tools for effective search and retrieval of information resources.

CONCLUSION

The availability of information in the electronic media has created an opportunity for global access to information. In this era, the information needs of almost every person have been increased in manifolds, which are based on the correctness, instantaneous and beyond the constraints of time and place. Pick and choose is the most common phenomena in addition to pin pointedness of information and the quality of resources. In regard to educational information resources, users centered delivery of information services is the new challenge of today's institutional library and information systems. This study provided an insight into the use of web based information resources by the faculty members of engineering colleges in Mysuru region. The dependency on internet based services is increasing everyday and users of engineering institutions are depending more on information resources available through web to meet there academic and research needs. The faculty members should be trained towards e-publishing, use of e-resources, search strategies and emerging educational technologies.

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